



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,888	12/20/2001	Tatsuki Kouwa	Q66962	2127
7590	01/12/2004			EXAMINER
SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			GONZALEZ, JULIO C	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/022,888	KOUWA, TATSUKI	
	Examiner	Art Unit	
	Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 21 November 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-10 is/are pending in the application.

    4a) Of the above claim(s) 3-6 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2 and 7-10 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 21 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) All    b) Some \* c) None of:  
        1. Certified copies of the priority documents have been received.  
        2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
        3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
    a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Prior Art Disclosure of the Applicant's invention.

The Applicant's Prior Art discloses a control unit for a vehicle generator 2, a control circuit 1 having an on-off switching section 1j for controlling the field current of the generator, a battery 5 (page 1, lines 11-13) and the control circuit interrupting the switching section when a voltage of the battery is higher than a predetermined voltage (page 2, lines 23-29-page 3, line 3), a power generation stop circuit 6 having an off detection circuit 6a and a power generation stop terminal 6c for interrupting the on-off control switching section (page 1, lines 15-21; page 2, lines 14-20; page 3, lines 3-11). Also, the prior art disclose that the power generation stop circuit 6c has a grounding switching section, which is operated based off a signal from the detection circuit, which stop power generation (see figure 5- Prior Art; page 3, lines 5-11, 14-17).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Disclosure of the Applicant's invention in view of Mashino et al (US 4,618,811).

The Applicant's Prior Art discloses a control unit for a vehicle generator 2, a control circuit 1 having an on-off switching section 1j for controlling the field current of the generator, a battery 5 (page 1, lines 11-13) and the control circuit interrupting the switching section when a voltage of the battery is higher than a predetermined voltage (page 2, lines 23-29-page 3, line 3), a power generation stop circuit 6 having an off detection circuit 6a and a power generation stop terminal 6c for interrupting the on-off control switching section (page 1, lines 15-21; page 2, lines 14-20; page 3, lines 3-11). Also, the prior art disclose that the power generation stop circuit 6c has a grounding switching section, which is operated based off a signal from the detection circuit, which stop power generation (see figure 5- Prior Art; page 3, lines 5-11, 14-17).

Although the Applicant's Prior Art discloses the rest of the claim limitations disclosed in claims 7-10, Mashino et al has been provided in order to illustrate better the limitations disclosed in the defendant claims 7-10.

Mashino et al discloses for the purpose of accurately detecting disconnection of wires and preventing damage to the loads, a control switch 13 for switching the field current on/off and the switch is a Darlington transistor (column 2, line 57) and the switch 13 is directly connected to terminals F and L, which are related to the stopping of power generation (see figures 1, 2 & column 2, lines 59-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a control unit for a vehicle as disclosed by the Applicant's Prior Art and to use a Darlington transistor for the purpose of accurately detecting disconnection of wires and preventing damage to the loads as disclosed by Mashino et al.

### ***Response to Arguments***

5.     Applicant's arguments with respect to claims 7-10 have been considered but are moot in view of the new ground(s) of rejection.
6.     Applicant's arguments filed 11/21/03 have been fully considered but they are not persuasive.

The Applicant's Prior Art Disclosure (PAD) discloses a control circuit which controls an on/off switch, which controls the excitation of the generator (page 2, line 23 – page 3, line3). More the PAD teaches a power generation stop circuit that controls a power generation stop terminal (page 1, lines 18-20; page 1, lines 11-13) and a detection circuit which detects the turning off of the key switch (page 2, lines 14, 15). Moreover, the PAD teaches of a power generation stop circuit (page 2, lines 14-20) and that the power generation may be stopped instantaneous (page 3, lines 10, 11).

It is also desirable to point out that figure 5 (Prior Art) discloses using a Darlington connection transistor 1j, which is use for turning on/off the field winding 2a and thus the excitation of the generator 2 and such switch 1j (Darlington transistor) is connected to a stop terminals L and S.

Respectfully, the power generation stop terminal is not disclosed structurally in the claims. It is only mention that such stop terminal is used “for interrupting said on-off control switching section” and that it is used for stopping power generation. There is no mention of what devices specifically make up such power generation stop terminal.

7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., stopping the power generation of a vehicle generator in a safe manner and without interrupting a large current upon the turning off of a key switch of a vehicle and by using the power generation stop terminal, it is unnecessary to interrupt a large current when the key switch of the vehicle is turned off) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563, which will be in effect until 02/02/04. The new phone number that will be in effect AFTER 02/02/04 will be (571) 272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

  
BURTON S. MULLINS  
PRIMARY EXAMINER